| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/542,611 | 07/18/2005 | Kenichiro Shinoi | L9289.05161 | 7286 |

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| EXAMINER |
|---|
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| ART UNIT | PAPER NUMBER |
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| 2611 | |

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|---|---|
| 12/30/2008 | PAPER |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

| Office Action Summary | Application No. | Applicant(s) |
| | 10/542,611 | SHINOI ET AL. |
| | Examiner | Art Unit |
| | NADER BOLOURCHI | 2611 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on <u>25 August 2008</u>.

2a)☒ This action is **FINAL**.          2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) <u>23-33</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>23-33</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All  b)☐ Some *  c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

# DETAILED ACTION

## *Remarks*

1.      Applicant's amendment dated 8/25/2008 is entered.

2.      Applicant canceling claims 12-22 is acknowledged.

3.      No claim is allowed.


## *Response to Arguments*

4.      The amendment filed 8/25/2008 is objected to under 35 U.S.C. 132(a) because it

introduces new matter into the disclosure.  35 U.S.C. 132(a) states that no amendment

shall introduce new matter into the disclosure of the invention.  The added material

which is not supported by the original disclosure is underlined as follows: Claim 23

recites (emphasis added):

          the transmitting section transmits the test data to the communication apparatus and

     transmits the packet data to the communication apparatus after transmission of the test data is

     finished; and

Claim 33 recites (emphasis added):


          transmitting the packet data to the communication apparatus after transmission of the test

     data is finished; and

Examiner notes that specification discloses:

The idea of the present invention is to conduct an accuracy measurement test of a CQI (Channel Quality Indicator), which is indicative of propagation environment, by transmitting test data for a fixed period prior to the CQI accuracy measurement test, taking a CQI reported frequently among reported CQIs from the communication apparatus under test within that period as a fixed CQI, and transmitting accuracy measurement data for a fixed period at a transmission rate corresponding to the fixed CQI.

Applicant is required to cancel the new matter in the reply to this Office Action.

### Claim Rejections - 35 USC § 112, second paragraph

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5.      Claims 23-33 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 23 (lines 3-8) and 33 (lines 4-9) use the phrase "packet" which is vague and

unclear. It is not clear what term "packet" is referring to.


Phrase "packet", used in the "Background Art" section of the Applicant's Specification,

for data to refer to the data transmitted for a fixed period of time (emphasis added):

```
20          Specifically, packets are transmitted for a fixed
       period to a communication apparatus under test such as
       a mobile station apparatus, with a transmission rate (that
       is, a modulation scheme, coding rate, and transport block
       size) corresponding to a fixed CQI, without regard to
25     the reported CQI from that communication apparatus.
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Therefore, it should be equivalent to "transmit data" shown in Fig. 3 (emphasis added):
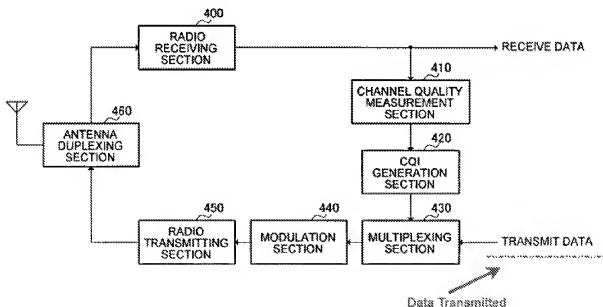


FIG.3

Furthermore, Fig. 2 clearly indicates that the <u>data transmitted</u> could be either <u>"test data"</u>

or "accuracy measurement data", which as discussed above, one should concludes that

"packet" is a data equivalent to  either "test data" or "accuracy measurement data

(emphasis added)
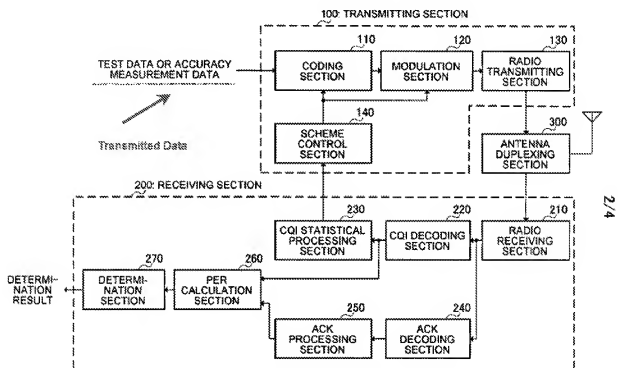


FIG.2

Which is in contradiction with the specification disclosing that the <u>data transmitted</u> must

be "<u>test data and accuracy measurement data</u>", which makes one to conclude that

"packet" is a data equivalent to "test data and accuracy measurement data" (emphasis

added)

> FIG.2 is a block diagram showing the configuration
> 10  of an accuracy measurement apparatus according to an
> embodiment of the present invention. The accuracy
> measurement apparatus shown in FIG.2 is mainly composed
> of a transmitting section 100 that transmits test data
> and accuracy measurement data, a receiving section 200
> 15  that receives Ack/Nack indicating whether or not a
> transmit signal has been received correctly and a reported
> CQI from the communication apparatus under test, and an
> antenna duplexing section 300 that shares an antenna
> between transmitting section 100 and receiving section
> 20  200.

However, claims 23 (lines 3-8) and 33 (lines 4-9) use the phrase "packet" for data to refer only to "accuracy measurement data", which makes the term "packet" vague and indefinite.

Claims 24-32 are rejected due to their dependency to rejected claim 23.

### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

/Nader Bolourchi/
Examiner, Art Unit 2611
12/4/2008

6.      In considering patentability of the claims under 35 U.S.C. 103(a), the examiner

presumes that the subject matter of the various claims was commonly owned at the

time any inventions covered therein were made absent any evidence to the contrary.

Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and

invention dates of each claim that was not commonly owned at the time a later invention

was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and

potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).


7.      Claims 23-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over

TR (3GPP, Draft TR 25.890v1.2.0, R4-021538 "HSDPA, UE Radio Transmission and

Reception", RAN WG4 meeting #25, Secaucus, NJ, USA, November 2002) in view of

Qualcomm (Qualcomm, R4-021533 "VRC Test Approach", RAN WG4 meeting #25,

Secaucus, NJ, USA, November 2002).


**Regarding claim 23**, TR discloses a testing apparatus (section "7.2. Test

Configuration" in page 10: Fig. 7.1) testing apparatus comprising: a setting section that

sets a transmission scheme to be used for transmission to a communication apparatus

wherein the setting section sets the transmission scheme to be used to transmit the

packet data based on the reported value of channel quality reported from the

communication apparatus in response to the test data ("the Modulation and Coding

Controller (MCC) function embedded in the Node-B" in page 6: lines 14-17); a

transmitting section that transmits packet data to the communication apparatus using the set transmission scheme wherein: the transmitting section transmits the test data to the communication apparatus and transmits the packet data to the communication apparatus after transmission of the test data is finished ("the Node-B" in page 6: lines 14-17); a determination section ("the Node-B emulator/MCC" in page 11: lines 5-12; "the assessment of the UE CQI behavior" in page 11: lines 13-18) that determines, based on a reception error rate of the transmitted packet data reported by the communication apparatus ("packet error rate" in page 11: lines 19-38), the requirement of a previously reported value of channel quality reported by the communication apparatus in relation to a transmission of test data ("required ... packet error rate" in page 11: lines 31-33). However, TR does not explicitly disclose that the test is an accuracy test and aforesaid **requirement** is the accuracy.


Qualcomm explicitly disclose that the determination section determines accuracy of said reported value ("verifying CQI reporting accuracy" in page 1: lines 7-13). Therefore, It would have been obvious to one of ordinary skill in the art, at the time the invention was made to combine the teaching of TR and Qualcomm for the purpose of "verify whether a UE is generating CQI reports that are in line with" modified "definition of CQI" as suggested by Qualcomm (page 1: lines 11-13).

 **Regarding claim 24**, TR and Qualcomm disclose, as stated in rejection of claim 23
above. TR also discloses that  the setting section sets, based on a reported value
reported by each of the communication apparatuses in response to the test
data("received CQI from the UE" in page 11: 5-12), a transmission scheme for each
communication apparatus ("the Modulation and Coding Controller (MCC) function
embedded in the Node-B" in page 6: lines 14-17); the transmitting section transmits test
data to a plurality of communication apparatuses and the transmitting section transmits
packet data to each communication apparatus using the transmission scheme set for
the communication apparatus ("a single packet" in page 11: lines 5-12); and the
determination section determines, based on a reception error rate of the packet data
reported by each communication apparatus, the accuracy of a previously reported value
of channel quality reported by each communication apparatus in response to the
communication of the test data ("packet error rate" in page 11: lines 19-38).

 **Regarding claim 25**, TR and Qualcomm disclose, as stated in rejection of claim 23
above. TR also discloses that the setting section sets a fixed transmission scheme
based on the reported value of channel quality reported by the communication
apparatus in response to the test data (each row of table 8.2, which indicates a fix
transmission for a given CQI report value).

 **Regarding claim 26**, TR and Qualcomm disclose, as stated in rejection of claim 23
above. Qualcomm also disclose that the setting section sets the transmission scheme in

accordance with statistics of the reported value of channel quality reported by the
communication apparatus in response to the test data ("Received HS-DSCH data is
assigned with a transport format which corresponds to the **statistical** median of all
reported CQI from an UE under static channel condition" In page 1: lines 20-23).
Therefore, It would have been obvious to one of ordinary skill in the art, at the time the
invention was made to combine the teaching of TR and Qualcomm for the purpose of
"verify whether a UE is generating CQI reports that are in line with" modified "definition
of CQI" as suggested by Qualcomm (page 1: lines 11-13).

**Regarding claim 27**, TR and Qualcomm disclose, as stated in rejection of claim 23
above. Qualcomm also disclose that the setting section sets the transmission scheme
based on a median value of multiple reported values of channel quality reported by the
communication apparatus in response to the test data ("Received HS-DSCH data is
assigned with a transport format which corresponds to the statistical **median** of all
reported CQI from an UE under static channel condition" In page 1: lines 20-23).
Therefore, It would have been obvious to one of ordinary skill in the art, at the time the
invention was made to combine the teaching of TR and Qualcomm for the purpose of
"verify whether a UE is generating CQI reports that are in line with" modified "definition
of CQI" as suggested by Qualcomm (page 1: lines 11-13).

**Regarding claim 28**, TR and Qualcomm disclose, as stated in rejection of claim 23
above. TR also discloses that the transmitting section transmits the packet data to the

communication apparatus using a predetermined channel ("the associated HS-DSCH"
in page 11: lines 5-12).


**Regarding claim 29**, TR and Qualcomm disclose, as stated in rejection of claim 23
above. TR also discloses that the reported value of channel quality reported by the
communication apparatus in response to the test data is generated based on a first
signal; and the transmitting section transmits a second signal ("the associated HS-
DSCH" in page 11: lines 5-12), different from the first signal, to the communication
apparatus ("the HS-DPCCH sub-frame transporting the CQI report" in page 11: lines 5-
12).


**Regarding claim 30**, TR and Qualcomm disclose, as stated in rejection of claim 23
above. Qualcomm also disclose that a calculation section ("Node B emulator" in page 3
lines 5-7)that calculates the reception error rate of the transmitted packet data in
association with values indicating channel quantity reported by the communication
apparatus ("$PER(k)$ is the nominal packet error rate for CQI k given that CQI k was
reported" in page 3: lines 1-18), wherein the determination section determines the
accuracy of the reported value of channel quality reported by the communication
apparatus ("$PER(k)$ ... for CQI k" in page 3: line 17) in response to the test data based
on a reception error rate ("verifying CQI reporting accuracy" in page 1: lines 7-13)
calculated by the calculation section in association with a specific value out of the

values indicating the channel quality ("given that CQI k was reported" in page 3: line

17).


**Regarding claim 31**, TR and Qualcomm disclose, as stated in rejection of claim 23

above. Qualcomm also disclose that a calculation section ("Node B emulator" in page 3

lines 5-7) that calculates reception error rates of the transmitted packet data (" $PER(k)$ is

the nominal packet error rate for CQI k given that CQI k was reported" in page 3: lines

1-18) in association with a plurality of values indicating channel quality reported from the

communication apparatus (" $\sum_k \text{Prob}(\text{reportedCQI}$ " in page 3: lines 1-18), wherein the

determination section determines the accuracy of the reported value of channel quality

reported from the communication apparatus in response to the test data based on the

reception error rates calculated by the calculation section ("verifying CQI reporting

accuracy" in page 1: lines 7-13) in association with: (1) a median value of the plurality of

values indicating channel quality reported from the communication apparatus

("Received HS-DSCH data is assigned with a transport format which corresponds to the

statistical **median** of all reported CQI from an UE under static channel condition" In

page 1: lines 20-23) and (2) a value different from the median value by a predetermined

level ("the transport block error probability would not exceed 0.1" in page 1: lines 16-19).


**Regarding claim 32**, TR and Qualcomm disclose, as stated in rejection of claim 23

above. TR also discloses a communication terminal testing apparatus (Fig. 7.1)

comprising a pass/fail decision section ("ACK/NACK transfer" in section "6.2. Test

configuration" page 10: lines 14-20) that decides whether a communication apparatus

which is a target of a test, passes or fails ("If the maximum number of transmission

attempts (specified in Annex A) is exceeded without reception of an ACK on the error-

free uplink HS-DPCCH, the entire content of the information bit payload is assumed to

have been lost" in page 8: lines 7-13), based on a test result in the accuracy testing

apparatus (Fig. 7.1).


**Regarding claim 33**, TR discloses accuracy testing method (section "7.2. Test

Configuration" in page 10: Fig. 7.1) comprising: a setting step of setting a transmission

scheme to be used for transmission to a communication apparatus wherein the setting

step sets the transmission scheme to be used to transmit the packet data based on the

reported value of the channel quality reported by the communication apparatus in

response to the test data ("the Modulation and Coding Controller (MCC) function

embedded in the Node-B" in page 6: lines 14-17); a transmitting step of transmitting

packet data to the communication apparatus using the set transmission scheme ("the

Modulation and Coding Controller (MCC) function embedded in the Node-B" in page 6:

lines 14-17), wherein the transmitting step comprising the steps of transmitting the test

data to the communication apparatus; and transmitting the packet data to the

communication apparatus after transmission of the test data is finished ("the Node-B" in

page 6: lines 14-17); a determination step ("the Node-B emulator/MCC" in page 11:

lines 5-12; "the assessment of the UE CQI behavior" in page 11: lines 13-18) of

determining, based on a reception error rate of the transmitted packet data reported by

the communication apparatus, the **requirement** of a previously reported value of

channel quality reported by the communication apparatus in relation to a transmission of

test data ("required … packet error rate" in page 11: lines 31-33)based on a reception

error rate of said packet data transmitted in said transmitting step ("packet error rate" in

page 11: lines 19-38). However, TR does not explicitly disclose that the test is an

accuracy test and aforesaid **requirement** is the accuracy.


Qualcomm explicitly disclose that the determination section determines accuracy of said

reported value ("verifying CQI reporting accuracy" in page 1: lines 7-13). Therefore, It

would have been obvious to one of ordinary skill in the art, at the time the invention was

made to combine the teaching of TR and Qualcomm for the purpose of "verify whether a

UE is generating CQI reports that are in line with" modified "definition of CQI" as

suggested by Qualcomm (page 1: lines 11-13)


### Conclusion

8.      The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure. Gesbert et al. (US 6760882 B1); Balachandran et al. (EP 0 944

201 A2); Ahkubo et al. (WO 01/78324 A1).

9.   **THIS ACTION IS MADE FINAL.**  Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).


10.   Applicant's amendment necessitated the new ground(s) of rejection presented in

this Office action.  Accordingly, **THIS ACTION IS MADE FINAL.**  See MPEP

§ 706.07(a).  Applicant is reminded of the extension of time policy as set forth in 37

CFR 1.136(a).


11.   A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action.  In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action.  In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the date of this final action.


### Contact Information

12.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Nader Bolourchi whose telephone number is (571) 272-

8064.  The examiner can normally be reached on M-F 8:30 to 4:30.

/Nader  Bolourchi/
Examiner, Art Unit 2611
12/4/2008

13.     If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, David. C. Payne can be reached on (571) 272-3024.  The fax phone number

for the organization where this application or proceeding is assigned is (571) 273-8300.


14.     Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system.  Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at (866) 217-9197 (toll-free).


/David C. Payne/

Supervisory Patent Examiner, Art Unit 2611